by Dr. Baur himself not to be constant; and I presume it will ultimately be found that his observation was made on an injured specimen.

In his latest paper on the classification of the Pleurodira Dr. Baur gives as one of the characters of the family Chelydidæ the presence of a nuchal shield, and includes *Elseya*, overlooking that that genus was established on the absence of a nuchal.

So much for Dr. Baur's accuracy in dealing with facts. His want of judgment as to what constitute family characters is best shown in his classification of the Pleurodira, where one neural plate more or less (often merely an individual peculiarity) is regarded as a family character, except in the Chelydidæ, where, better informed, he admits their variation from 7 to 0! *Pelomedusa*, which is placed by him with *Podocnemis* in the family Pelomedusidæ, is beyond question much more nearly related to *Sternothærus*, which, in his system, forms another family. As there is not at present the slightest reason for splitting the Pelomedusidæ, or Pleurodira with mesoplastra, into several families, the new terms Mesoplastralia and Amesoplastralia were uncalled for, and only show, together with the proposal of a new name (*Erymnochelys*) to replace *Dumerilia*, preoccupied and a synonym of *Podocnemis*, the unfortunate fondness of the author for coining names whenever the slightest opportunity offers.

*A Comparison of the Cretaceous Fish-fauna of Mount Lebanon with that of the English Chalk**. By A. Smith Woodward, F.G.S., F.Z.S.

No detailed comparison having hitherto been instituted between the Cretaceous fish-fauna of Mount Lebanon and that of the English Chalk, which belongs to a well-determined horizon, the author has undertaken a general survey of the genera, with the result that the two faunas are proved to have more forms in common than hitherto supposed. The Selachian fishes are scarcely comparable, *Notidanus* and *Squatina* being the only genera as yet recognized in the two formations, although the English teeth named *Lamna rhaphiodon* seem to belong to the Syrian shark named *Rhinognathus*; on the whole, those of Mount Lebanon exhibit the most modern facies, all traces of Hybodont Sharks and of *Ptychodus* being wanting. Chimæroids are unknown at Mount Lebanon, but abundantly met with in the English Chalk. Among Ganoids there are representatives of the Pycnodonts both in the Lebanon (*Palæobalistum*, *Coccodus*, *Xenopholis*) and in England (*Cœlodus*), but no identical genera can yet be recognized. Rhombic-scaled Ganoids are rare in the English Chalk (*Lophiostomus*, *Neorhombolepis*), and unknown in Mount Lebanon; traces of Acipenseroids also occur in the former, but have not been discovered in the latter; and at least one Crossopterygian genus occurs plentifully in England (*Macropo-*

* Abstract of paper read before Section C, British Association, Bath, September 1888.

ma), while no certain remains have been detected in the Syrian beds. *Belonostomus*, however, is common to the two formations, one species having been described from Mount Lebanon under the name of *Rhinellus laniatus*.

Of Physostomous Teleosteans, the great early families represented in the Chalk of England and the Upper Cretaceous of North America by *Portheus*, *Ichthyodectes*, *Protosphyræna*, and *Pachyrhizodus* are quite unknown in the deposits of Mount Lebanon; but in the latter locality *Enchodus* is abundant, having been described under the synonym of *Eurygnathus*, and this is accompanied by a closely-allied genus, *Eurypholis*, only differing in the possession of a few dermal scutes. The English *Pomognathus* may also be regarded as represented at Mount Lebanon, for the so-called *Phylactocephalus* merely differs in the presence of extremely delicate minute scales, which would not be preserved in a matrix of the nature of the Chalk; and *Aspidopleurus* (Mount Lebanon) possesses scutes undistinguishable from the detached examples long known in the English Chalk under the name of *Prionolepis*. *Dercetis*, also, is met with abundantly in the Syrian beds, being described under the synonym of *Leptotrachelus*. Among Elopine Clupeoids, some undescribed forms occur in the English Chalk, and one from Mount Lebanon has been erroneously assigned to the genus *Clupea* (‘*C. Lewisii*’); and the supposed Salmonoid, *Osmeroides*, is common to the two formations, though inferior in size at the last-named locality. In the Syrian deposits, however, there are many more specialized Physostomi, such as *Cheirothrix*, *Spaniodon*, *Opistopteryx*, *Rhinellus*, *Scombroclupea*, *Diplomystus*, and *Clupea*, of which no traces appear to be discoverable in collections of English Chalk fossils. Among Physoclystous Teleosteans but few genera are common to the two formations under comparison. *Hoplopteryx*, with perhaps *Beryx*, represents the Berycidæ in both localities; but only a single imperfect specimen from the English Chalk can yet be assigned to any higher type, namely, *Plataxˇ* (?) *nuchalis*. At Mount Lebanon more specialized Physoclysti are numerous, as *Plataxˇ*, *Imogaster*, and *Pycnosterinæ*; although to the latter have been erroneously assigned certain extraneous forms, including at least one well-marked Berycoid, the so-called *Pycnosterinæ Lewisii*.

The conclusion is thus arrived at, that in those respects in which the Lebanon fish-fauna differs from that of the English Chalk, it exhibits greater specialization. Considered alone, therefore, it is distinctly of a more modern type than the latter, although the beds in which it occurs are regarded, from other evidence, as being of Senonian or even Turonian age.

On Bucklandium diluvii, *König, a Siluroid Fish from the London Clay of Sheppey* *. By A. Smith Woodward, F.G.S., F.Z.S.

In his well-known ‘Icones Fossilium Sectiles,’ pl. viii., No. 91,

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